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FORMULAS.

C_2-GROUP.

2 III.

C_2H_2NI. Iodcyanmethane. *Loy* and *Acree*..... 224
C_2H_3ON. Amide of methanecarboxylic acid. *Reid*..... 331

C_4-GROUP.

4 III.

$C_4H_6ON_4$. 4,5 - Diamino - 2 - keto - 1,2 - dihydro - 1,3 - diazine. $+H_2O$. $2HCl$, $H_2SO_4 + H_2O$, $4HNO_3$. *Johns*..... 82

C_5-GROUP.

5 III.

$C_5H_4O_2N_4$. 2,5 - Diketo - 2,3,4,5 - tetrahydro - 1,3,4,6 - benztetrazole (2,8 - dioxypurine). $K + 2H_2O$, $Na + 4H_2O$, $2HNO_3$, HCl. *Johns*..... 84

C_6-GROUP.

6 II.

$C_6H_{12}O_6$. (1) *d*-Glucose. *Upson* 458
(2) *d*-Galactose. *Upson* 458

6 IV.

$C_6H_{12}O_2N_2S$. α - Keto - δ - mercapto - α - ureidopentane. *Johnson* and *Hill* 362

6 V.

$C_6H_5O_2NBr_2S$. (1) Dibromamide of benzenesulphonic acid. *Kastle* 219
(2) Amide of 2,5-dibrombenzene-1-sulphonic acid. *Kastle* .. 219

C_7-GROUP.

7 III.

C_7H_7ON. Amide of benzenecarboxylic acid. *Reid* 38, 328

7 IV.

$C_7H_7O_3NS$. 2 - Aminobenzene - 1 - carboxylic - 4 - sulphonic acid. $+0.5\ H_2O$. Ag_2 (p. 67). *Kastle* 58

C_8-GROUP.

8 III.

$C_8H_6O_4N_2$. 2,5 - Diketo - 4 - [2 - furylmethenyl]tetrahydro - 1,3 - diazole. *Wheeler* and *Hoffman* 380

8 IV.

$C_8H_6O_2NBr_3$. Methyl ester of 2,4,6 - tribrom - 3 - aminobenzene - 1-carboxylic acid. *Wheeler* and *Hoffman* 444

C_9-GROUP.

9 II.

$C_9H_{14}O_5$. ζ - Hydroxy - α - heptene - δ,δ - dicarboxylic acid. Ag_2. *Johnson* and *Hill* 367

9 III.

$C_9H_8O_8N_2$. 3,5 - Dinitro - 2,4 - dimethylbenzene - 1 - carboxylic acid. *Wheeler* and *Hoffman* 439
$C_9H_9O_2I$. 3 - Iod - 2,4 - dimethylbenzene - 1 - carboxylic acid. *Wheeler* and *Hoffman* 443
$C_9H_9O_4N$. 3 - Nitro - 2,4 - dimethylbenzene - 1 - carboxylic acid. *Wheeler* and *Hoffman* 441
$C_9H_{10}O_3N_2$. Amide of 3 - nitro - 2,4 - dimethylbenzene - 1 - carboxylic acid. *Wheeler* and *Hoffman* 441
$C_9H_{10}O_4N_2$. 3 - Nitro - 5 - amino - 2,4 - dimethylbenzene - 1 - carboxylic acid. HCl. *Wheeler* and *Hoffman* 440
$C_9H_{11}O_2N$. (1) α - Amino - β - phenylethane - α - carboxylic acid (phenylalanine). *Wheeler* and *Hoffman* 368
(2) 3 - Amino - 2,4 - dimethylbenzene - 1 - carboxylic acid. *Wheeler* and *Hoffman* 436

$C_9H_{11}O_3N$. α - Amino - β - [4 - hydroxyphenyl]ethane - α - carboxylic acid (tyrosine). *Wheeler* and *Hoffman*..... 368

9 IV.

$C_9H_8ON_2S$. 5 - Keto - 2 - thiocarbonyl - 3 - phenyltetrahydro - 1,3-diazole. *Wheeler* and *Brautlecht*..... 455

$C_9H_{11}O_3NS$. 2 - Ethylaminobenzene - 1 - carboxylic - 4 - sulphonic acid. $+H_2O$. Ba + $4H_2O$ (p. 73). *Kastle*..... 71

$C_9H_{14}O_2N_2S$. Ethyl ester of 2 - amino - 4 - keto - 7 - methyl - 4,5,6,7 - tetrahydrohexathiazole - 5 - carboxylic acid. *Johnson* and *Hill*..... 361

$C_9H_{16}O_2N_2S$. 2,4,6 - Triketo - 5 - phenylmethyl - 5 - [β - mercaptopropyl]tetrahydro - 1,3 - diazole. *Johnson* and *Hill*... 363

C_{10}-GROUP.

10 II.

$C_{10}H_8N_2$. α,β - Dicyan - α - phenylethane. *Cobb*..... 604

10 III.

$C_{10}H_7O_4N_3$. 2,5 - Diketo - 4 - [4 - nitrophenylmethenyl]tetrahydro - 1,3 - diazole. *Wheeler* and *Hoffman*..... 381

$C_{10}H_{10}O_2N_2$. 2,5 - Diketo - 4 - phenylmethyltetrahydro - 1,3 - diazole. *Wheeler* and *Hoffman*..... 372

$C_{10}H_{10}O_3N_2$. 2,5 - Diketo - 4 - [4 - hydroxyphenylmethyl]tetrahydro-1,3-diazole. *Wheeler* and *Hoffman*..... 377

$C_{10}H_{12}O_2N_2$. (1) α - Ureido - β - phenylethane - α - carboxylic acid. *Wheeler* and *Hoffman*..... 373

(2) Compound obtained from 4-benzylhydantoin and Al amalgam. + $3Al(OH)_3$. *Wheeler* and *Hoffman*..... 373

$C_{10}H_{12}O_4N_2$. α - Ureido - β - [4 - hydroxyphenyl]ethane - α - carboxylic acid. *Wheeler* and *Hoffman*..... 379

$C_{10}H_{13}O_2N$. Ethyl ester of phenylaminomethanecarboxylic acid. HCl. *Wheeler* and *Brautlecht*..... 454

10 IV.

$C_{10}H_6O_2N_2Cl_2$. 2,5 - Diketo - 4 - [3,5 - dichlor - 4 - hydroxyphenylmethenyl]tetrahydro - 1,3 - diazole. *Wheeler* and *Hoffman*..... 381

$C_{10}H_{14}O_3N_2S$. Lactone of β - hydroxy - δ - [ketothioureido - methyl] - ζ - heptene - δ - carboxylic acid. *Johnson* and *Hill*..... 366

C_{11}-GROUP.

11 II.

$C_{11}H_{10}O_5$. Acid obtained from ethyl α - cyancinnamyliden - acetate. $+0.5H_2O$, + $1.5H_2O$. *Reimer*..... 420

11 III.

$C_{11}H_8O_4N_2$. Methylene ether of 2,5 - diketo - 4 - [3,4 - dihydroxyphenylmethenyl]tetrahydro - 1,3 - diazole. *Wheeler* and *Hoffman*..... 380

$C_{11}H_9O_2N$. (1) α - Propenylimide of benzene - 1,2 - dicarboxylic acid. *Johnson* and *Jones*..... 343
(2) β - Propenylimide of benzene - 1,2 - dicarboxylic acid. *Johnson* and *Jones*..... 343
$C_{11}H_{10}O_2N_2$. 2,5 - Diketo - 4 - [4 - methoxyphenylmethenyl] - tetrahydro-1,3-diazole. *Wheeler* and *Hoffman*..... 375
$C_{11}H_{11}O_3N$. (1) Mono - α - propenylamide of benzene - 1,2 - di - carboxylic acid. *Johnson* and *Jones*..... 353
(2) Mono - β - propenylamide of benzene - 1,2 - dicarboxylic acid. *Johnson* and *Jones*..... 355
$C_{11}H_{12}O_5N_2$. 3 - Nitro - 5 - acetylamino - 2,4 - dimethylbenzene - 1-carboxylic acid. *Wheeler* and *Hoffman*..... 441
$C_{11}H_{13}O_3N$. 3 - Acetylamino - 2,4 - dimethylbenzene - 1 - car - boxylic acid. *Wheeler* and *Hoffman*..... 442

11 IV.

$C_{11}H_7O_2N_2Br$. Compound obtained from anisalhydantoin and Br *Wheeler* and *Hoffman*..... 376

C_{13}-GROUP.

13 II.

$C_{13}H_{14}O_4$. Lactone of δ - hydroxy - α - phenylpentane - β,β - di - carboxylic acid. Ag. *Johnson* and *Hill*..... 365
$C_{13}H_{16}O_5$. δ - Hydroxy - α - phenylpentane - β,β - dicarboxylic acid. Ag_2. *Johnson* and *Hill*..... 366

13 III.

$C_{13}H_{11}O_2N$. Methyl ester of α - cyan - δ - phenyl - α,γ - butadiene - α - carboxylic acid. *Reimer*..... 422
$C_{13}H_{16}O_2S$. δ - Mercapto - α - phenylpentane - β,β - dicarboxylic acid. K. *Johnson* and *Hill*..... 364

C_{14}-GROUP.

14 III.

$C_{14}H_{13}O_2N$. Ethyl ester of α - cyan - δ - phenyl - α,δ - butadiene - α-carboxylic acid. *Reimer*..... 427

14 IV.

$C_{14}H_{10}O_2N_2S$. 5 - Keto - 2 - thiocarbonyl - 4 - [2 - furylmethenyl] - 1 - phenyltetrahydro - 1,3 - diazole. *Wheeler* and *Brautlecht*..... 454
$C_{14}H_{12}O_4N_2S$. Lactone of β - hydroxy - ε - keto - δ - phenylmethyl-ε - thioureidopentane - δ - carboxylic acid. *Johnson* and *Hill*..... 365

C_{15}-GROUP.

15 IV.

$C_{15}H_{12}ON_2S$. 5 - Keto - 2 - thiocarbonyl - 1,3 - diphenyltetrahy - dro-1,3-diazole. *Wheeler* and *Brautlecht*..... 457

C_{16}-GROUP.

16 III.

$C_{16}H_{12}O_3N$. (1) 2,5 - Diketo - 4 - phenylmethenyl - 1 - phenyl - tetrahydro-1,3-diazole. *Wheeler* and *Brautlecht*..... 451
(2) 2,5 - Diketo - 4 - phenylmethenyl - 3 - phenyltetrahydro - 1,3-diazole. *Wheeler* and *Brautlecht*..... 456

16 IV.

$C_{16}H_{11}O_4N_2S$. (1) 5 - Keto - 2 - thiocarbonyl - 4 - [4 - nitrophenylmethenyl] - 1 - phenyltetrahydro - 1,3 - diazole. *Wheeler* and *Brautlecht*..... 453
(2) 5 - Keto - 2 - thiocarbonyl - 4 - [4 - nitrophenylmethenyl]-3 - phenyltetrahydro - 1,3 - diazole. *Wheeler* and *Brautlecht* 456
$C_{16}H_{13}ON_2S$. (1) 5 - Keto - 2 - thiocarbonyl - 4 - phenylmethenyl-1 - phenyltetrahydro - 1,3 - diazole. *Wheeler* and *Brautlecht* 448
(2) 5 - Keto - 2 - thiocarbonyl - 4 - phenylmethenyl - 3 - phenyltetrahydro - 1,3 - diazole. *Wheeler* and *Brautlecht*.. 455
$C_{16}H_{12}O_2N_2S$. 5 - Keto - 2 - thiocarbonyl - 4 - [2 - hydroxyphenylmethenyl] - 1 - phenyltetrahydro - 1,3 - diazole. *Wheeler* and *Brautlecht*..... 454
$C_{16}H_{20}O_3N_2S$. Ethyl ester of 2 - amino - 4 - keto - 7 - methyl - 5 - phenylmethyl - 4,5,6,7 - tetrahydrohexathiazole - 5 - carboxylic acid. *Johnson* and *Hill*..... 363

C_{17}-GROUP.

17 III.

$C_{17}H_{14}O_3N_2$. 2,5 - Diketo - 4 - [4 - methoxyphenylmethenyl] - 1 - phenyltetrahydro-1,3-diazole. *Wheeler* and *Hoffman*..... 382

17 IV.

$C_{17}H_{13}O_4N_2S$. Methylene ether of 5 - keto - 2 - thiocarbonyl - 4 - [3,4 - dihydroxyphenylmethenyl] - 1 - phenyltetrahydro - 1,3-diazole. *Wheeler* and *Brautlecht*..... 452
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$C_{17}H_{14}O_2N_2S$. 5 - Keto - 2 - thiocarbonyl - 4 - [4 - methoxyphenylmethenyl] - 1 - phenyltetrahydro - 1,3 - diazole. *Wheeler* and *Brautlecht*..... 451

C_{18}-GROUP.

18 II.

$C_{18}H_{16}O_4$. Acid obtained from ethyl α-cyancinnamylidenacetate. *Reimer*..... 429

18 IV.

$C_{18}H_{14}ON_2S$. 5 - Keto - 2 - thiocarbonyl - 4 - [β - phenylethenyl - methenyl] - 1 - phenyltetrahydro - 1,3 - diazole. *Wheeler* and *Brautlecht*..... 452

$C_{18}H_{16}ON_2S$. (1) 5 - Keto - 2 - ethylmercapto - 4 - phenylmethenyl - 1 - phenyl - 4,5 - dihydro - 1,3 - diazole. *Wheeler* and *Brautlecht*..... 450
(2) 5 - Keto - 2 - ethylmercapto - 4 - phenylmethenyl - 3 - phenyl - 4,5 - dihydro - 1,3 - diazole. *Wheeler* and *Brautlecht* 456

C_{19}-GROUP.

19 IV.

$C_{19}H_{18}O_2N_2S$. 5 - Keto - 2 - ethylmercapto - 4 - [4 - methoxy - phenylmethenyl] - 1 - phenyl - 4,5 - dihydro - 1,3 - diazole. *Wheeler* and *Brautlecht*..... 451

C_{20}-GROUP.

20 II.

$C_{20}H_{20}O_4$. Dimethyl ester of acid obtained from ethyl α-cyan-cinnamylidenacetate. *Reimer*..... 429

20 IV.

$C_{20}H_{17}O_3NS$. Methylsultam of 1 - hydroxydiphenylmethyl-benzene-2-sulphonic acid. *Cobb* and *Fuller*..... 607

C_{21}-GROUP.

21 II.

$C_{21}H_{20}O_6$. Curcumin. *Jackson* and *Clarke*..... 48

21 III.

$C_{21}H_{21}O_6N$. Oxime of curcumin. *Jackson* and *Clarke*..... 58
$C_{21}H_{22}O_6Br_2$. Product obtained from curcumin and HBr. *Jackson* and *Clarke*..... 55

C_{22}-GROUP.

22 IV.

$C_{22}H_{16}ON_2S$. 5 - Keto - 2 - thiocarbonyl - 4 - phenylmethenyl - 1,3 - diphenyltetrahydro - 1,3 - diazole. *Wheeler* and *Brautlecht*..... 457
$C_{22}H_{22}O_3NS$. Methylamide of 1 - hydroxydi[4 - methylphenyl] - methylbenzene-2-sulphonic acid. *Cobb* and *Fuller*..... 608

C_{23}-GROUP.

23 II.

$C_{23}H_{24}O_6$. Dimethyl ether of curcumin. *Jackson* and *Clarke*.. 57

23 IV.

$C_{23}H_{18}ON_2S$. (1) 5 - Keto - 2 - phenylmethylmercapto - 4 - phenylmethenyl - 1 - phenyl - 4,5 - dihydro - 1,3 - diazole. *Wheeler* and *Brautlecht*..... 450
(2) 5 - Keto - 2 - thiocarbonyl - 4 - [4 - methoxyphenylmethenyl] - 1,3 - diphenyltetrahydro - 1,3 - diazole. *Wheeler* and *Brautlecht*..... 458

C_{26}-GROUP.

26 III.

$C_{20}H_{22}O_4N_2$. Dimethyl ester of 2,4 - diphenyltetrahydro - R - butene - 1,3 - di[β - cyanethylene - β - carboxylic acid] *Reimer* 425

C_{28}-GROUP.

28 III.

$C_{22}H_{26}O_4N_2$. (1) Diethyl ester of α,η - dicyan - δ - phenyl - γ - phenylmethenyl - α,ζ - heptadiene - α,η - dicarboxylic acid. *Reimer* 428

(2) Diethyl ester of 2,4 - diphenyltetrahydro - R - butene - 1,3-di[β-cyanethylene-β-carboxylic acid]. *Reimer* 433

28 IV.

$C_{22}H_{26}O_4N_2Br_2$. Diethyl ester of γ - brom - α,η - dicyan - δ - phenyl - γ - phenylbrommethyl - α,ζ - heptadiene - α,η - di - carboxylic acid. *Reimer* 432

C_{60}-GROUP.

69 II.

$C_{69}H_{49}O_{17}$. Product obtained from curcumin and HBr. K_7. *Jackson* and *Clarke* 56

ERRATA.

Vol. 43, pp. 260, 262, 264, 267, 273, 276, footnotes, for Dict. Chim. Gén. read Ber. d. chem. Ges.

Vol. 45, p. 429, l. 20, formula should be $C_{13}H_{10}O_4$.